

CLAIM AMENDMENTS

Claims 1-21 (Cancelled)

Claim 22 (Previously Presented)

A method for forming the film comprising a fatty acid cellulose ester having an acetyl group and a propionyl group, the method comprising steps of

casting a dope onto a belt or drum to form a film,

peeling the film from the belt or drum,

drying the peeled film by a tenter drying method,

wherein a sum of degree of acetyl substitution (DSac) and degree of propionyl substitution (DSpr) of the fatty acid cellulose ester of the film is 2.8 or less, and a retardation value (Rt value) of the film in the thickness direction defined by Formula 1 is 60 to 300 nm,

$$\text{Formula 1: } RT \text{ value} = ((n_x + n_y)/2 - n_z) \times d$$

wherein n_x represents a refractive index of the fatty acid cellulose ester film in the direction giving maximum refractive index in the plane of the fatty acid cellulose ester film, n_y represents a refractive index of the fatty acid cellulose ester film in the direction perpendicular to

the direction giving maximum refractive index in the plane of the fatty acid cellulose ester film, n_z represents a refractive index of the fatty acid cellulose ester film in the thickness direction, and d (nm) represents the thickness of the fatty acid cellulose ester film.

Claim 23 (Previously Presented)

The method of Claim 22, wherein the retardation value represented by Formula (1) is 60 to 250 nm.

Claim 24 (Previously Presented)

The method of Claim 23, wherein the retardation value represented by Formula 1 is 90 to 200 nm.

Claim 25 (Previously Presented)

The method of Claim 24, wherein the retardation value represented by Formula 1 is 90 to 175 nm.

Claim 26 (Previously Presented)

The method of Claim 25, wherein the retardation value represented by Formula 1 is 100 to 175 nm.

Claim 27 (Previously Presented)

The method of Claim 22, wherein a stretching factor by a tenter method is between 2 and 50 percent.

Claim 28 (Previously Presented)

The method of Claim 22, wherein a thickness of the fatty acid cellulose ester film is between 40 and 190 μm .

Claim 29 (Previously Presented)

The method of Claim 22, wherein the fatty acid cellulose ester film comprises a fatty acid cellulose ester having DSac of 1.5 to 2.3, and DSpr of 0.5 to 1.2.

Claim 30 (Previously Presented)

The method of Claim 22, wherein the fatty acid cellulose ester of the fatty acid cellulose ester film comprises the fatty acid cellulose ester having a DSac of between 1.5 and 2.0.

Claim 31 (Previously Presented)

The method of Claim 22, wherein the fatty acid cellulose ester of the fatty acid cellulose ester film comprises the fatty acid cellulose ester having a DSpr of between 0.9 and 1.2.

Claim 32 (Previously Presented)

The method of Claim 22, wherein the fatty acid cellulose ester film comprises a plasticizer selected from a group consisting of a phosphoric acid ester compound, a fatty acid ester compound, a phthalic acid ester and citric acid ester compound, in an amount of 1 to 30 weight parts per 100 weight parts of the fatty acid cellulose ester film.

Claim 33 (Previously Presented)

The method of Claim 22, wherein the fatty acid cellulose ester film comprises fine particles having an average particle size of not more than 0.1 μm in an amount of 0.005 to 0.3 weight parts per 100 weight parts of the fatty acid cellulose ester film.

Claim 34 (Previously Presented)

The method of Claim 22, wherein the fatty acid cellulose ester film comprises a UV absorber in an amount of 0.8 to 2.0 weight parts per 100 weight parts of the fatty acid cellulose ester film.

Claim 35 (Previously Presented)

The method of Claim 22, wherein the fatty acid cellulose ester film comprises foreign matter particles having a size of 5 to 50 μm in an amount of not more than 200 per 250 mm^2 and substantially no foreign matter particle having a size of at least 50 μm is observed in cross Nicol state.

Claim 36 (Previously Presented)

The method of Claim 22, wherein a dope casting on a belt or drum comprises chlorine free solvents in an amount of at least 50 percent by weight with respect to the all solvent amount.

Claim 37 (Previously Presented)

The method of Claim 22, wherein a dope casting on a belt or drum comprises at least one alcohol-free solvent and the amount of an alcohol based solvent is 30 percent or less with respect to the total solvent amount.

Claim 38 (Previously Presented)

The method of Claim 22, wherein peeling tension at the peeling is from 50 to 400 N/m.

Claim 39 (Previously Presented)

The method of Claim 22, wherein conveyance tension at the drying is from 50 to 200 N/m.

Claim 40 (Previously Presented)

The method of Claim 22, wherein tenter drying method is a pin tenter method or a clip tenter method.

Claim 41 (Previously Presented)

The method of Claim 40, wherein a stretching factor of a pin tenter or clip tenter is from 2 to 50 percent.

Claim 42 (Previously Presented)

The method of Claim 41, wherein the stretching factor of a pin tenter or clip tenter is from 5 to 40 percent.

Claim 43 (Previously Presented)

The method of Claim 42, wherein the stretching factor of a pin tenter or clip tenter is from 10 to 30 percent.

Claim 44 (Previously Presented)

The method of Claim 22, wherein a residual solvent amount of the film during peeling is from 5 to 100 percent.

Claim 45 (Previously Presented)

A film comprising a fatty acid cellulose ester having an acetyl group and a propionyl group,

wherein a sum of degree of acetyl substitution (DSac) and degree of propionyl substitution (DSpr) of the fatty acid cellulose ester of the film is 2.8 or less, and a retardation value (Rt value) of the film in the thickness direction defined by Formula 1 is 60 to 300 nm,

$$\text{Formula 1: Rt value} = (n_x + n_y)/2 - n_z \times d$$

wherein n_x represents a refractive index of the fatty acid cellulose ester film in the direction giving maximum refractive index in the plane of the fatty acid cellulose ester film, n_y represents a refractive index of the fatty acid cellulose ester film in the direction perpendicular to the direction giving maximum refractive index in the plane of the fatty acid cellulose ester film, n_z represents a refractive index of the fatty acid cellulose ester film in the thickness direction, and $d(\text{nm})$ represent the thickness of the fatty acid cellulose ester film,

wherein the film is prepared by a method comprising steps of

casting a dope onto a belt or drum to form a film,
peeling the film from the belt or drum,
drying the peeled film by a tenter drying method.

Claim 46 (Previously Presented))

The film of Claim 45, wherein the retardation value represented by Formula 1 is 60 to 250 nm.

Claim 47 (Previously Presented)

The film of Claim 46, wherein the retardation value represented by Formula 1 is 90 to 200 nm.

Claim 48 (Previously Presented)

The film of Claim 47, wherein the retardation value represented by Formula 1 is 90 to 175 nm.

Claim 49 (Previously Presented)

The film of Claim 48, wherein the retardation value represented by Formula 1 is 100 to 175 nm.

Claim 50 (Previously Presented)

The film of Claim 45, wherein a stretching factor by a tenter method is between 2 and 50 percent.

Claim 51 (Previously Presented)

The film of Claim 45, wherein a thickness of the fatty acid cellulose ester film is between 40 and 190 μm .

Claim 52 (Previously Presented)

The film of Claim 45, wherein the fatty acid cellulose ester film comprises a fatty acid cellulose ester having DSac of 1.5 to 2.3, and DSpr of 0.5 to 1.2.

Claim 53 (Previously Presented)

The film of Claim 45, wherein the fatty acid cellulose ester of the fatty acid cellulose ester film comprises the fatty acid cellulose ester having a DSac of between 1.5 and 2.0.

Claim 54 (Previously Presented)

The film of Claim 45, wherein the fatty acid cellulose ester of the fatty acid cellulose ester film comprises the fatty acid cellulose ester having a DSpr of between 0.9 and 1.2.

Claim 55 (Previously Presented)

The film of Claim 45, wherein the fatty acid cellulose ester film comprises a plasticizer selected from a group consisting of a phosphoric acid ester compound, a fatty acid ester compound, a phthalic acid ester and citric acid ester compound, in an amount of 1 to 30 weight parts per 100 weight parts of the fatty acid cellulose ester film.

Claim 56 (Previously Presented)

The film of Claim 45, wherein the fatty acid cellulose ester film comprises fine particles having an average particle size of not more than 0.1 μm in an amount of 0.005 to 0.3 weight parts per 100 weight parts of the fatty acid cellulose ester film.

Claim 57 (Previously Presented)

The film of Claim 45, wherein the fatty acid cellulose ester film comprises a UV absorber in an amount of 0.8 to 2.0 weight parts per 100 weight parts of the fatty acid cellulose ester film.

Claim 58 (Previously Presented)

The film of Claim 45, wherein the fatty acid cellulose ester film comprises foreign matter particles having a size of 5 to 50 μm in an amount of not more than 200 per 250 mm^2 and substantially no foreign matter particles having a size of at least 50 μm is observed in cross Nicol state.

Claim 59 (Previously Presented)

The film of Claim 45, wherein a dope casting on a belt or drum comprises chlorine free solvents in an amount of at least 50 percent by weight with respect to the all solvent amount.

Claim 60 (Previously Presented)

The film of Claim 45, wherein a dope casting on a belt or drum comprises at least one alcohol-free solvent and the amount of an alcohol based solvent is 30 percent or less with respect to the total solvent amount.

Claim 61 (Previously Presented)

The film of Claim 45, wherein peeling tension at the peeling is from 50 to 400 N/m.

Claim 62 (Previously Presented)

The film of Claim 45, wherein conveyance tension at the drying is from 50 to 200 N/m.

Claim 63 (Previously Presented)

The film of Claim 45, wherein tenter drying method is a pin tenter method or a clip tenter method.

Claim 64 (Previously Presented)

The film of Claim 63, wherein a stretching factor of a pin tenter or clip tenter is from 2 to 50 percent.

Claim 65 (Previously Presented)

The film of Claim 64, wherein the stretching factor of a pin tenter or clip tenter is from 5 to 40 percent.

Claim 66 (Previously Presented)

The film of Claim 65, wherein the stretching factor of a pin tenter or clip tenter is from 10 to 30 percent.

Claim 67 (Previously Presented)

The film of Claim 45, wherein a residual solvent amount of the film during peeling is from 5 to 100 percent.

68. (Previously Presented)

A method for forming a film comprising a fatty acid cellulose ester having an acetyl group and a propionyl group, the method comprising steps of

casting a dope onto a belt or drum to form a,

peeling the film from the belt or drum,

drying the peeled film by a tenter drying method, wherein the fatty acid cellulose ester film comprises a fatty acid cellulose ester having a degree of acetyl substitution DS_{ac} of 1.5 to 2.3, and a degree of propionyl substitution DS_{pr} of 0.6 to 1.2, and

a retardation value (Rt value) of the film in the thickness direction defined by Formula 1 is 60 to 300 nm,

$$\text{Formula 1: } Rt \text{ value} = \{ (n_x + n_y) / 2 - n_z \} \times d$$

wherein n_x represents a refractive index of the fatty acid cellulose ester film in the direction giving maximum refractive index in the plane of the fatty acid cellulose ester film, n_y represents a refractive index of the fatty acid cellulose ester film in the direction perpendicular to the direction giving maximum refractive index in the plane of the fatty acid cellulose ester film, n_z represents a refractive index of the fatty acid cellulose ester film in the thickness direction, and d (nm) represent the thickness of the fatty acid cellulose ester film.

69. (Previously Presented)

The method of Claim 68, wherein the retardation value represented by Formula (1) is 90 to 200 nm.

70. (Previously Presented)

The method of Claim 69, wherein the retardation value represented by Formula (1) is 100 to 175 nm.

71. (Previously Presented)

The method of Claim 68, wherein a thickness of the fatty acid cellulose ester film is between 40 and 190 μm .

72. (Previously Presented)

The method of Claim 68, wherein the fatty acid cellulose ester film comprises a plasticizer selected from a group consisting of a phosphoric acid ester compound, a fatty acid ester compound, a phthalic acid ester and citric acid ester compound, in an amount of 1 to 30 weight parts per 100 weight parts of the fatty acid cellulose ester film.

73. (Previously Presented)

The method of Claim 68, wherein the fatty acid cellulose ester film comprises fine particles having an average particle size of not more than 0.1 μm in an amount of 0.005 to 0.3 weight parts per 100 weight parts of the fatty acid cellulose ester film.

74. (Previously Presented)

The method of Claim 68, wherein the fatty acid cellulose ester film comprises a UV absorber in an amount of 0.8 to 2.0 weight parts per 100 weight parts of the fatty acid cellulose ester film.

75. (Previously Presented)

The method of Claim 68, wherein the fatty acid cellulose ester film comprises foreign matter particles having a size of 5 to 50 μm in an amount of not more than 200 per 250 mm^2 and substantially no foreign matter particle having a size of at least 50 nm is observed in cross Nicol state.

76. (Previously Presented)

The method of Claim 68, wherein a dope casting on a belt or drum comprises chlorine free solvents in an amount of at least 50 percent by weight with respect to the all solvent amount.

77. (Previously Presented)

The method of Claim 68, wherein a dope casting on a belt or drum comprises at least one alcohol-free solvent and the amount of an alcohol based solvent is 30 percent or less with respect to the total solvent amount.

78. (Previously Presented)

The method of Claim 68, wherein peeling tension at the peeling is from 50 to 400 N/m.

79. (Previously Presented)

The method of Claim 68, wherein conveyance tension at the drying is from 50 to 200 N/m.

80. (Previously Presented)

The method of Claim 68, wherein tenter drying method is a pin tenter method or a clip tenter method.

81. (Previously Presented)

The method of Claim 80, wherein a stretching factor of a pin tenter or clip tenter is from 2 to 50 percent.

82. (Previously Presented)

The method of Claim 81, wherein the stretching factor of a pin tenter or clip tenter is from 5 to 40 percent.

83. (Previously Presented)

The method of Claim 82, wherein the stretching factor of a pin tenter or clip tenter is from 10 to 30 percent.

84. (Previously Presented)

The method of Claim 68, wherein a residual solvent amount of the film during peeling is from 5 to 100 percent.

85. (Previously Presented)

A film comprising a fatty acid cellulose ester having an acetyl group and a propionyl group,

wherein the fatty acid cellulose ester film comprises a fatty acid cellulose ester having a degree of acetyl substitution DSac of 1.5 to 2.3, and a degree of propionyl substitution DSpr of 0.6 to 1.2, and

a retardation value (Rt value) of the film in the thickness direction defined by Formula 1 is 60 to 300 nm,

$$\text{Formula 1: } Rt \text{ value} = \{(n_x + n_y)/2 - n_z\} \times d$$

wherein n_x represents a refractive index of the fatty acid cellulose ester film in the direction giving maximum refractive index in the plane of the fatty acid cellulose ester film, n_y represents a refractive index of the fatty acid cellulose ester film in the direction perpendicular to the direction giving maximum refractive index in the plane of the fatty acid cellulose ester film, n_z represents a refractive index of the fatty acid cellulose ester film in the thickness direction, and d (nm) represent the thickness of the fatty acid cellulose ester film,

wherein the film is prepared by a method comprising steps of

casting a dope onto a belt or drum to form a film,
peeling the film from the belt or drum, and
drying the peeled film by a tenter drying method.

86. (Previously Presented)

The film of Claim 85, wherein the retardation value represented by Formula (1) is 90 to 200 nm.

87. (Previously Presented)

The film of Claim 86, wherein the retardation value represented by Formula (1) is 100 to 175 nm.

88. (Previously Presented)

The film of Claim 85, wherein a thickness of the fatty acid cellulose ester film is between 40 and 190 μm .

89. (Previously Presented)

The film of Claim 85, wherein the fatty acid cellulose ester film comprises a plasticizer selected from a group consisting of a phosphoric acid ester compound, a fatty acid ester compound, a phthalic acid ester and citric acid ester compound, in an amount of 1 to 30 weight parts per 100 weight parts of the fatty acid cellulose ester film.

90. (Previously Presented)

The film of Claim 85, wherein the fatty acid cellulose ester film comprises fine particles having an average particle size of not more than 0.1 μm in an amount of 0.005 to 0.3 weight parts per 100 weight parts of the fatty acid cellulose ester film.

91. (Previously Presented)

The film of Claim 85, wherein the fatty acid cellulose ester film comprises a UV absorber in an amount of 0.8 to 2.0 weight parts per 100 weight parts of the fatty acid cellulose ester film.

92. (Previously Presented)

The film of Claim 85, wherein the fatty acid cellulose ester film comprises foreign matter particles having a size of 5 to 50 μm in an amount of not more than 200 per 250 mm^2 and substantially no foreign matter particle having a size of at least 50 nm is observed in cross Nicol state.

93. (Currently Amended)

The film of Claim ~~68~~ 85, wherein a dope casting on a belt or drum comprises chlorine free solvents in an amount of at least 50 percent by weight with respect to the all solvent amount.

94. (Currently Amended)

The film of Claim ~~68~~ 85, wherein a dope casting on a belt or drum comprises at least one alcohol-free solvent and the amount of an alcohol based solvent is 30 percent or less with respect to the total solvent amount.

95. (Currently Amended)

The film of Claim ~~68~~ 85, wherein peeling tension at the peeling is from 50 to 400 N/m.

96. (Currently Amended)

The film of Claim ~~68~~ 85, wherein conveyance tension at the drying is from 50 to 200 N/m.

97. (Currently Amended)

The film of Claim ~~68~~ 85, wherein tenter drying method is a pin tenter method or a clip tenter method.

98. (Currently Amended)

The film of Claim ~~80~~ 97, wherein a stretching factor of a pin tenter or clip tenter is from 2 to 50 percent.

99. (Currently Amended)

The film of Claim ~~84~~ 98, wherein the stretching factor of a pin tenter or clip tenter is from 5 to 40 percent.

100. (Currently Amended)

The film of Claim ~~82~~ 99, wherein the stretching factor of a pin tenter or clip tenter is from 10 to 30 percent.

101. (Currently Amended)

The film of Claim ~~68~~ 85, wherein a residual solvent amount of the film during peeling is from 5 to 100 percent.